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ACIDIC PRECIPITATION IN ONTARIO STUDY

ANNUAL STATISTICS OF CONCENTRATION AND DEPOSITION -DAILY PRECIPITATION AND AIR MONITORING NETWORK, 1985

ARB-087-87-AQM

APIOS-014-87

MAY 1987

Ontario
Ministry of the Environment

E. PICHÉ, Director
Air Resources Branch

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This report was prepared by Diane Green of the APIOS Atmospheric Deposition and Chemistry Program. However, the data themselves are a product of the combined efforts of many individuals. Precipitation samples were collected by a large number of site operators, whose names cannot be individually mentioned here, under the coordination of the APIOS environmental technicians Steve Elliott (in Southwestern Region), Dave Allcock (in Southeastern Region), Wim Smits (in Northwestern Region) and J.P. Varto (in Central Region). Sample handling was carried out by Dan Orr and Scott Kennedy, and overall network coordination by Bill Bardswick of the Air Resources Branch. Chemical analyses were performed at the Laboratory Services Branch under the coordination of Frank Tomassini and Barry Loescher. Invaluable clerical and computer assistance were provided by Koshy Mathew and William Chang respectively, of C.C and C. Computer Systems Inc. All enquiries regarding the reported data should be directed to Neville Reid, Coordinator, Atmospheric Deposition and Chemistry Program, at (416) 965-1634.

AR36-24

TABLE OF CONTENTS

		Page
PART I	INTRODUCTION	III
PART II	STATION DESCRIPTION AND LOCATION MAP	IV
PART III	SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY STATION	

Station	Map Ref. No.	
Balsam Lake	06	1
Charleston Lake	11	2
Dorset	08	3
Fernberg	16	4
Forbes Township	13	5
Graham Lake	12	6
Longwoods	02	7
Melbourne	01	8
Nithgrove	07	9
North Easthope	03	10
Quetico Centre	14	11
Railton	10	12
Raven Lake	05	13
Wellesley	04	14
Wilmer	9A	15

PART IV	SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY REGION	
	Central Region	16
	Northwestern Region	17
	Southeastern Region	18
	Southwestern Region	19
PART V	SUMMARY STATISTICS OF WET DEPOSITION BY STATION	

Station	Map Ref. No.	
Balsam Lake	06	20
Charleston Lake	11	21
Dorset	08	22
Fernberg	16	23
Forbes Township	13	24
Graham Lake	12	25
Longwoods	02	26

Melbourne	01	27
Nithgrove	07	28
North Easthope	03	29
Quetico Centre	14	30
Railton	10	31
Raven Lake	05	32
Wellesley	04	33
Wilmer	9A	34

PART VI SUMMARY STATISTICS OF WET DEPOSITION BY REGION

Central Region	35
Northwestern Region	36
Southeastern Region	37
Southwestern Region	38

PART VII SUMMARY STATISTICS OF AIR CONCENTRATION BY STATION, REGION

Station	Map Ref. No.	
Charleston Lake, SE Reg.	11	39
Dorset, Central Region	08	40
Fernberg, NW Region	16	41
Longwoods, SW Region	02	42

PART I

INTRODUCTION

INTRODUCTION

This report was prepared by Diane Green. The statistical summaries presented in this report pertain to the 1985 analytical results obtained from the Acidic Precipitation in Ontario Study (APIOS) daily precipitation and air monitoring network. The relevant data can be obtained on request from the Air Resources Branch of the Ministry. All available data are utilized in the calculations except results reported as being unreliable (i.e. results are identified as unreasonable values by using the validation procedures; detailed description of the validation procedures is available from the Ministry upon request) or approximate (i.e., inexact results are reported due to laboratory difficulties, such as may be encountered in calibration, or when the sample cannot be re-analyzed to confirm the reported values). In a very few cases, concentration levels exceeded the upper limit of the range of the chemical analysis. Rather than using the upper limit, a decision was made to exclude these values from the statistics generated in this report. If a reported value is labelled as <W, it is replaced by a "zero". W is the level which the analytical technique cannot distinguish from zero. If a level is recorded less than the detection limit T, a value corresponding to one half the detection limit is utilized for statistical calculations as reported in the statistical summaries. Note that T is normally about ten times W, and values above the T criterion are considered to be precise and accurate. W corresponds to approximately one standard deviation of low level duplicates of real samples.

The reported precipitation gauge depth (standard rain gauge or nipher shielded snow gauge) is utilized in the calculation of deposition. If a rain gauge value is not available then the collected sample volume is converted to its equivalent precipitation depth and is used in the deposition calculation.

In the air concentration statistical summaries, "Nitric" represents "Nitric Acid" and "Totl NO_3" represents total nitrates calculated by the summation of particulate "Nitrate" and "Nitric Acid". The air filter measurement for sulfur dioxide includes a contribution from nylon-filter impregnated SO_4.

The statistical summaries presented in Parts III to VII include the number of samples, mean (arithmetic/geometric), standard deviation (arithmetic/geometric), maximum, minimum and quartiles and volume weighted means using precipitation gauge depths where appropriate.

PART II

STATION DESCRIPTION AND LOCATION MAP

Figure 1

APIOS Event Wet/Dry Deposition Network Station Locations

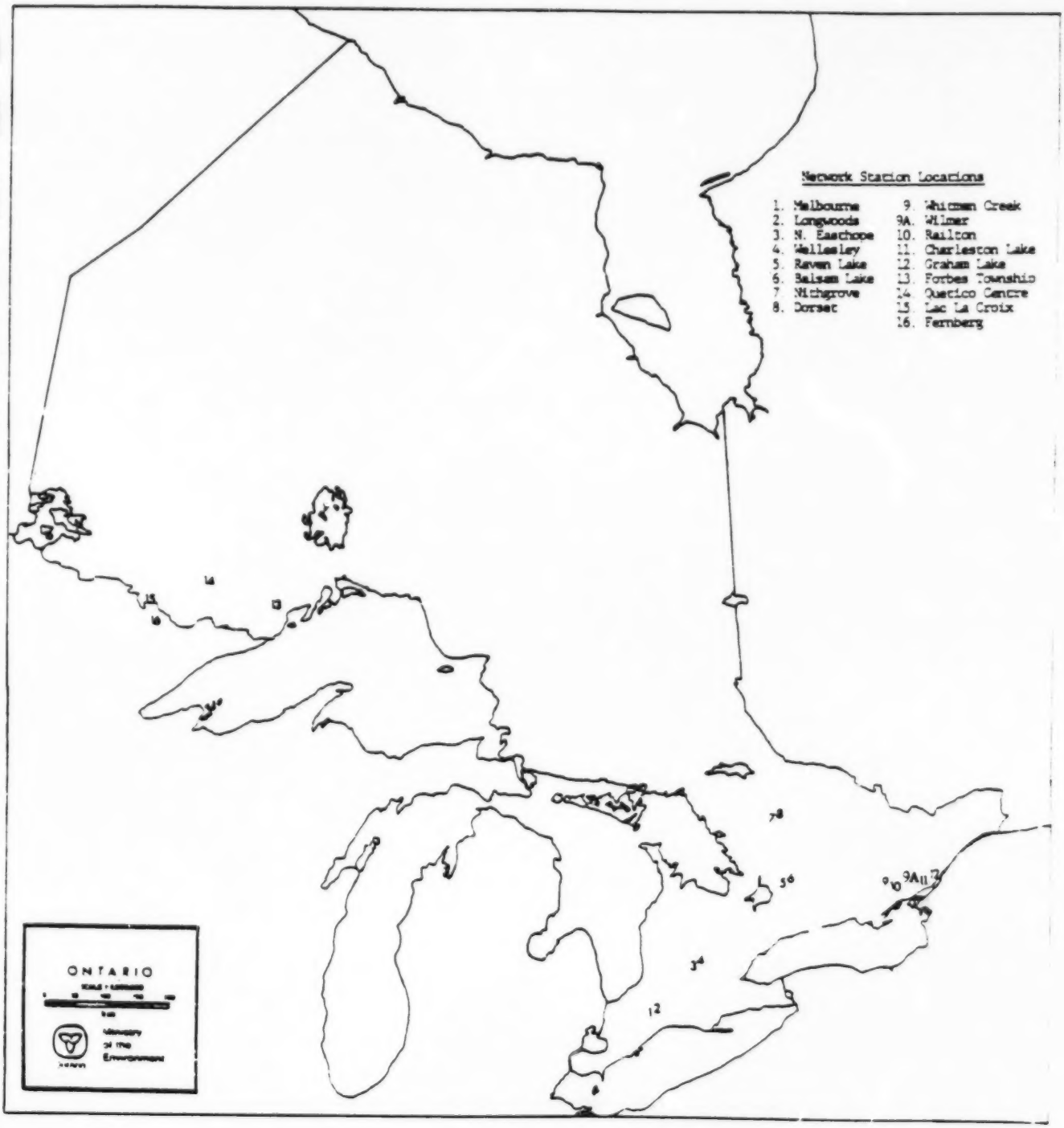

TABLE 1

APIOS EVENT WET/DRY DEPOSITION NETWORK SITE LOCATIONS

AREA	MOE REGION	STATION NAME	INSTRUMENTATION	ELEVATION (m above MSL)	LATITUDE (North)	LONGITUDE (West)	UTM COORDINATES (Northing)	(Easting)
London	Southwestern	Longwoods	Wet and Dry	239	42°53'	81°29'	4747850	460700
		Melbourne	Wet	213	42°47'	81°33'	4736850	454600
		North Easthope	Wet	375	43°24'	80°53'	4805650	508650
		Wellesley	Wet	344	43°28'	80°46'	4812650	519500
Dorset	Central	Dorset	Wet and Dry	320	45°13'	78°56'	5009650	662400
		Nithgrove	Wet	325	45°12'	79°04'	5006800	651600
		Balsam Lake	Wet	259	44°38'	78°51'	4943400	670070
		Raven Lake	Wet	274	44°37'	78°54'	4941600	665750
Kingston	Southeastern	Charleston Lake	Wet and Dry	92	44°30'	76°03'	4927500	417150
		Graham Lake	Wet	130	44°35'	75°52'	4936750	431450
		Railton	Wet	156	44°23'	76°36'	4914700	373200
		Whitman Creek*	Wet	137	44°29'	76°49'	4927200	355100
		Wilmer*	Wet	145	44°27'	76°32'	4921500	378250
Atikokan	Northwestern	Fernberg	Wet and Dry	506	47°50'	91°52'	5316000	585000
		Forbes Twsp.	Wet	324	48°38'	89°37'	5388000	308000
		Quetico Centre	Wet	420	48°45'	91°12'	5399000	632000
		Lac La Croix*	Wet	368	48°21'	92°12'	5356000	558200

* Whitman Creek site removed from network November 1984; installed Wilmer October 1985 (replacing Whitman Creek)
Lac La Croix site removed from network March, 1984

PART III

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY STATION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

PERIOD OF REPORT : JAN 6,85 TO DEC 31,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES :	146	120	85	135	135	134	128
MAXIMUM :	170.0	90.0	7.2	7.8	0.3802	0.4500	16.80
MINIMUM :	0.0	2.4	3.6	3.4	0.0000	0.0035	0.10
RANGE :	170.0	87.6	3.6	4.4	0.3802	0.4465	16.70
ARITH. MEAN :	7.3	27.8	4.4	4.6	0.0545	0.0829	2.82
ARITH. STD. DEV :	15.5	17.3	0.5	0.8	0.0600	0.0732	2.92
GEOM. MEAN :	3.1	22.9	4.4	4.5	0.0253	0.0625	1.80
GEOM. STD. DEV. :	4.0	1.9	1.1	1.2	5.9520	2.1386	2.69
1ST QUARTILE :	1.2	15.4	4.1	4.2	0.0195	0.0415	0.95
2ND QUARTILE :	3.7	23.6	4.3	4.4	0.0389	0.0619	1.77
3RD QUARTILE :	7.3	37.6	4.5	4.7	0.0661	0.0954	3.77
VOL. WGT. MEAN :	******	25.3	******	******	0.0429	0.0696	2.44

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	127	110	128	110	109	110	122
MAXIMUM :	3.700	2.850	1.160	0.440	0.345	0.615	3.650
MINIMUM :	0.000	0.000	0.000	0.000	0.000	0.002	0.000
RANGE :	3.700	2.850	1.160	0.440	0.345	0.613	3.650
ARITH. MEAN :	0.653	0.467	0.193	0.054	0.042	0.093	0.384
ARITH. STD. DEV :	0.591	0.590	0.189	0.078	0.057	0.100	0.548
GEOM. MEAN :	0.485	0.258	0.130	0.027	0.022	0.062	0.208
GEOM. STD. DEV. :	2.234	3.116	2.707	3.825	3.705	2.533	3.564
1ST QUARTILE :	0.255	0.115	0.080	0.005	0.005	0.035	0.092
2ND QUARTILE :	0.520	0.195	0.130	0.020	0.025	0.065	0.220
3RD QUARTILE :	0.820	0.530	0.240	0.062	0.055	0.118	0.440
VOL. WGT. MEAN :	0.443	0.268	0.117	0.030	0.036	0.061	0.312

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

PERIOD OF REPORT : JAN 1,85 TO DEC 30,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	123	99	11	117	117	117	106
MAXIMUM	90.2	93.0	4.7	6.1	0.4169	0.5590	15.60
MINIMUM	0.0	4.8	3.8	3.4	0.0008	0.0206	0.07
RANGE	90.2	88.2	1.0	2.7	0.4161	0.5384	15.52
ARITH. MEAN	7.8	36.9	4.3	4.3	0.0797	0.1183	3.01
ARITH. STD. DEV	11.3	22.0	0.3	0.4	0.0653	0.0815	2.79
GEOM. MEAN	3.8	30.1	4.3	4.2	0.0557	0.0965	1.96
GEOM. STD. DEV.	3.7	2.0	1.1	1.1	2.6478	1.9181	2.78
1ST QUARTILE	1.9	17.6	4.0	3.9	0.0335	0.0598	1.20
2ND QUARTILE	4.0	33.2	4.3	4.2	0.0631	0.1005	2.20
3RD QUARTILE	9.6	49.8	4.4	4.5	0.1109	0.1525	3.88
VOL. WGT. MEAN	******	29.1	******	******	0.0544	0.0854	2.31

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	106	97	106	98	99	98	97
MAXIMUM	4.550	2.370	1.640	0.960	0.525	1.000	3.200
MINIMUM	0.025	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	4.525	2.370	1.640	0.960	0.525	1.000	3.200
ARITH. MEAN	0.827	0.254	0.252	0.050	0.033	0.073	0.288
ARITH. STD. DEV	0.695	0.340	0.282	0.112	0.075	0.133	0.383
GEOM. MEAN	0.575	0.153	0.166	0.030	0.036	0.034	0.190
GEOM. STD. DEV.	2.569	2.835	3.052	3.903	4.142	4.040	2.957
1ST QUARTILE	0.310	0.080	0.085	0.005	0.002	0.008	0.070
2ND QUARTILE	0.645	0.135	0.160	0.020	0.008	0.032	0.175
3RD QUARTILE	1.160	0.265	0.330	0.045	0.040	0.080	0.355
VOL. WGT. MEAN	0.489	0.167	0.132	0.026	0.018	0.038	0.213

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM 808

PERIOD OF REPORT : JAN 1,85 TO JAN 1,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	211	143	103	164	164	167	151
MAXIMUM	37.8	95.6	6.5	7.0	0.4074	0.5150	12.25
MINIMUM	0.0	3.8	3.3	3.4	0.0001	0.0178	0.05
RANGE	37.8	91.8	3.1	3.6	0.4073	0.4972	12.20
ARITH. MEAN	5.4	27.7	4.3	4.4	0.0589	0.0887	2.49
ARITH. STD. DEV	6.9	17.6	0.4	0.5	0.0617	0.0732	2.44
GEOM. MEAN	2.4	22.8	4.3	4.4	0.0361	0.0703	1.59
GEOM. STD. DEV.	4.2	1.9	1.1	1.1	3.2863	1.9373	2.78
1ST QUARTILE	0.8	15.1	4.1	4.1	0.0237	0.0447	0.85
2ND QUARTILE	2.6	23.6	4.3	4.4	0.0427	0.0668	1.77
3RD QUARTILE	7.8	35.4	4.5	4.6	0.0716	0.1045	3.02
VOL. WGT. MEAN	******	24.5	******	******	0.0462	0.0727	2.17

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	152	136	151	137	138	138	150
MAXIMUM	4.450	1.660	1.810	0.375	0.325	0.320	2.190
MINIMUM	0.010	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	4.440	1.660	1.810	0.375	0.325	0.320	2.190
ARITH. MEAN	0.672	0.227	0.166	0.034	0.041	0.057	0.304
ARITH. STD. DEV	0.710	0.287	0.193	0.049	0.053	0.059	0.337
GEOM. MEAN	0.429	0.126	0.113	0.024	0.035	0.039	0.173
GEOM. STD. DEV.	2.839	3.664	2.910	3.514	3.227	3.316	3.532
1ST QUARTILE	0.245	0.050	0.045	0.005	0.006	0.010	0.072
2ND QUARTILE	0.485	0.130	0.120	0.020	0.025	0.037	0.165
3RD QUARTILE	0.860	0.280	0.230	0.037	0.055	0.080	0.447
VOL. WGT. MEAN	0.475	0.182	0.108	0.028	0.030	0.040	0.272

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM 816

PERIOD OF REPORT : JAN 6,85 TO DEC 29,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	53	47	0	48	48	48	47
MAXIMUM	37.2	42.1	******	7.5	0.0468	0.0900	5.10
MINIMUM	0.1	2.4	******	4.3	0.0000	0.0098	0.15
RANGE	37.1	39.7	******	3.2	0.0467	0.0802	4.95
ARITH. MEAN	9.2	14.3	******	5.5	0.0100	0.0314	1.72
ARITH. STD. DEV	8.4	8.4	******	0.9	0.0119	0.0154	1.24
GEOM. MEAN	5.1	12.0	******	5.5	0.0029	0.0285	1.30
GEOM. STD. DEV.	4.0	1.9	******	1.2	0.1824	1.5427	2.29
1ST QUARTILE	3.2	8.8	******	4.8	0.0005	0.0203	0.85
2ND QUARTILE	7.1	12.1	******	5.2	0.0068	0.0270	1.47
3RD QUARTILE	12.7	17.8	******	6.3	0.0148	0.0355	2.07
VOL. WGT. MEAN	******	12.1	******	******	0.0102	0.0310	1.48

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	47	47	46	47	47	46	46
MAXIMUM	1.350	2.550	1.510	0.365	0.755	1.250	2.150
MINIMUM	0.010	0.010	0.000	0.000	0.002	0.002	0.000
RANGE	1.340	2.540	1.510	0.365	0.752	1.247	2.150
ARITH. MEAN	0.339	0.483	0.185	0.077	0.098	0.144	0.437
ARITH. STD. DEV	0.261	0.597	0.297	0.087	0.146	0.238	0.499
GEOM. MEAN	0.234	0.267	0.101	0.055	0.051	0.053	0.237
GEOM. STD. DEV.	2.895	3.222	3.123	2.978	3.168	4.449	5.323
1ST QUARTILE	0.175	0.110	0.050	0.020	0.025	0.025	0.027
2ND QUARTILE	0.275	0.270	0.090	0.042	0.047	0.057	0.342
3RD QUARTILE	0.435	0.525	0.165	0.100	0.090	0.123	0.515
VOL. WGT. MEAN	0.273	0.344	0.143	0.057	0.069	0.116	0.355

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

PERIOD OF REPORT : JAN 7,85 TO DEC 23,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES :	120	97	0	101	101	102	98
MAXIMUM :	53.6	75.3	******	7.3	0.1318	0.1760	10.70
MINIMUM :	0.0	1.9	******	3.9	0.0000	0.0073	0.00
RANGE :	53.6	73.4	******	3.4	0.1318	0.1687	10.70
ARITH. MEAN :	7.3	12.1	******	5.4	0.0126	0.0328	1.56
ARITH. STD. DEV :	9.8	12.5	******	0.8	0.0211	0.0267	2.01
GEOM. MEAN :	3.3	8.9	******	5.4	0.0036	0.0274	0.91
GEOM. STD. DEV. :	4.0	2.1	******	1.2	6.8671	1.7258	2.94
1ST QUARTILE :	1.5	5.8	******	4.8	0.0009	0.0182	0.47
2ND QUARTILE :	3.4	8.3	******	5.2	0.0060	0.0256	0.88
3RD QUARTILE :	8.3	12.4	******	6.0	0.0146	0.0360	1.60
VOL. WGT. MEAN :	******	8.5	******	******	0.0083	0.0273	0.99

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	95	90	98	90	91	91	96
MAXIMUM :	1.780	1.540	1.060	0.305	0.205	0.445	2.950
MINIMUM :	0.000	0.010	0.000	0.002	0.000	0.000	0.000
RANGE :	1.780	1.530	1.060	0.303	0.205	0.445	2.950
ARITH. MEAN :	0.263	0.418	0.086	0.045	0.035	0.059	0.273
ARITH. STD. DEV :	0.298	0.365	0.152	0.053	0.036	0.076	0.482
GEOM. MEAN :	0.198	0.292	0.079	0.024	0.030	0.037	0.255
GEOM. STD. DEV. :	2.885	2.497	3.210	3.391	2.952	2.966	3.586
1ST QUARTILE :	0.085	0.180	0.010	0.008	0.008	0.010	0.004
2ND QUARTILE :	0.175	0.280	0.025	0.030	0.030	0.040	0.118
3RD QUARTILE :	0.355	0.485	0.100	0.055	0.050	0.062	0.288
VOL. WGT. MEAN :	0.165	0.332	0.043	0.032	0.027	0.036	0.187

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

PERIOD OF REPORT : JAN 13,85 TO DEC 28,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	105	73	17	80	80	80	78
MAXIMUM	44.2	84.0	6.2	7.3	0.3162	0.4230	16.05
MINIMUM	0.0	5.3	3.9	3.5	0.0000	0.0173	0.35
RANGE	44.2	78.7	2.3	3.8	0.3162	0.4057	15.70
ARITH. MEAN	8.7	38.1	4.5	4.4	0.0715	0.1064	3.96
ARITH. STD. DEV	9.8	21.2	0.6	0.6	0.0551	0.0688	3.10
GEOM. MEAN	4.6	31.5	4.5	4.3	0.0443	0.0866	2.94
GEOM. STD. DEV.	3.3	2.0	1.1	1.1	4.1531	1.9692	2.24
1ST QUARTILE	1.4	21.7	4.2	4.0	0.0302	0.0572	1.63
2ND QUARTILE	4.6	34.6	4.4	4.2	0.0617	0.0926	2.92
3RD QUARTILE	12.0	52.1	4.5	4.5	0.1084	0.1515	5.22
VOL. WGT. MEAN	******	29.6	******	******	0.0522	0.0808	2.71

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	78	69	78	71	71	71	76
MAXIMUM	3.580	1.700	0.900	0.330	0.175	0.385	3.750
MINIMUM	0.070	0.050	0.015	0.002	0.000	0.000	0.050
RANGE	3.510	1.650	0.885	0.327	0.175	0.385	3.700
ARITH. MEAN	0.862	0.430	0.212	0.072	0.054	0.087	0.526
ARITH. STD. DEV	0.712	0.420	0.192	0.078	0.051	0.084	0.560
GEOM. MEAN	0.613	0.281	0.127	0.040	0.036	0.057	0.350
GEOM. STD. DEV.	2.400	2.517	3.182	3.291	3.493	3.558	2.512
1ST QUARTILE	0.295	0.140	0.070	0.020	0.010	0.020	0.192
2ND QUARTILE	0.680	0.215	0.150	0.035	0.035	0.060	0.380
3RD QUARTILE	1.225	0.625	0.308	0.098	0.080	0.127	0.580
VOL. WGT. MEAN	0.532	0.253	0.131	0.042	0.030	0.053	0.338

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

PERIOD OF REPORT : JAN 1,85 TO DEC 28,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES :	142	124	82	136	136	135	130
MAXIMUM :	59.2	95.5	6.6	7.6	0.3802	0.4620	21.50
MINIMUM :	0.1	5.0	3.6	3.4	0.0000	0.0131	0.15
RANGE :	59.1	90.5	3.0	4.2	0.3802	0.4489	21.35
ARITH. MEAN :	7.5	31.5	4.4	4.8	0.0547	0.0831	3.67
ARITH. STD. DEV :	8.4	18.6	0.5	1.0	0.0620	0.0729	3.19
GEOM. MEAN :	4.5	26.4	4.4	4.7	0.0176	0.0620	2.66
GEOM. STD. DEV. :	2.9	1.9	1.1	1.2	10.7321	2.1842	2.33
1ST QUARTILE :	2.2	18.8	4.1	4.2	0.0168	0.0379	1.45
2ND QUARTILE :	4.6	26.6	4.3	4.3	0.0452	0.0681	2.88
3RD QUARTILE :	9.6	40.6	4.4	4.8	0.0676	0.0999	4.35
VOL. WGT. MEAN :	******	27.8	******	******	0.0491	0.0763	2.95

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	131	115	130	117	118	118	128
MAXIMUM :	5.150	3.030	1.690	0.580	1.300	0.480	2.900
MINIMUM :	0.025	0.015	0.009	0.000	0.000	0.000	0.005
RANGE :	5.125	3.015	1.681	0.580	1.300	0.480	2.895
ARITH. MEAN :	0.785	0.548	0.332	0.099	0.102	0.115	0.476
ARITH. STD. DEV :	0.815	0.576	0.317	0.110	0.138	0.094	0.519
GEOM. MEAN :	0.527	0.338	0.223	0.061	0.069	0.087	0.289
GEOM. STD. DEV. :	2.538	2.860	2.595	2.937	2.776	2.467	3.002
1ST QUARTILE :	0.355	0.170	0.140	0.035	0.040	0.050	0.140
2ND QUARTILE :	0.530	0.355	0.220	0.060	0.067	0.090	0.342
3RD QUARTILE :	0.875	0.610	0.390	0.103	0.125	0.150	0.582
VOL. WGT. MEAN :	0.519	0.352	0.211	0.064	0.069	0.084	0.339

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM 801

PERIOD OF REPORT : DEC 31,84 TO DEC 25,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	107	96	61	99	99	99	98
MAXIMUM	40.0	84.1	6.4	7.0	0.3388	0.4360	16.50
MINIMUM	0.1	11.3	3.8	3.5	0.0001	0.0171	0.60
RANGE	39.9	72.8	2.6	3.6	0.3388	0.4189	15.90
ARITH. MEAN	8.6	34.5	4.4	4.4	0.0641	0.0918	3.66
ARITH. STD. DEV	8.4	15.6	0.5	0.6	0.0564	0.0650	2.70
GEOM. MEAN	5.4	31.2	4.3	4.4	0.0390	0.0767	2.97
GEOM. STD. DEV.	2.8	1.6	1.1	1.1	4.3260	1.8106	1.90
1ST QUARTILE	2.6	22.6	4.1	4.1	0.0288	0.0520	1.82
2ND QUARTILE	5.8	29.6	4.2	4.3	0.0525	0.0751	2.97
3RD QUARTILE	11.5	43.1	4.4	4.5	0.0785	0.1095	4.55
VOL. WGT. MEAN	******	30.3	******	******	0.0535	0.0788	2.93

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	98	94	98	93	95	94	98
MAXIMUM	3.940	3.060	1.230	0.490	0.570	0.465	2.380
MINIMUM	0.100	0.000	0.010	0.000	0.000	0.002	0.035
RANGE	3.840	3.060	1.220	0.490	0.570	0.462	2.345
ARITH. MEAN	0.712	0.497	0.230	0.079	0.062	0.087	0.434
ARITH. STD. DEV	0.519	0.610	0.201	0.094	0.077	0.091	0.372
GEOM. MEAN	0.582	0.273	0.154	0.046	0.040	0.052	0.313
GEOM. STD. DEV.	1.895	3.674	2.703	3.237	3.363	3.005	2.334
1ST QUARTILE	0.385	0.150	0.095	0.025	0.010	0.030	0.185
2ND QUARTILE	0.555	0.280	0.180	0.050	0.035	0.055	0.327
3RD QUARTILE	0.910	0.545	0.295	0.082	0.082	0.103	0.542
VOL. WGT. MEAN	0.523	0.341	0.173	0.056	0.044	0.068	0.316

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

PERIOD OF REPORT : JAN 1,85 TO DEC 31,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	166	124	73	133	133	134	132
MAXIMUM	32.0	97.1	6.1	7.1	0.3388	0.4190	11.00
MINIMUM	0.0	3.2	3.5	3.5	0.0001	0.0178	0.07
RANGE	32.0	93.9	2.6	3.7	0.3388	0.4012	10.92
ARITH. MEAN	6.7	25.3	4.4	4.6	0.0518	0.0796	2.66
ARITH. STD. DEV	7.1	16.2	0.5	0.7	0.0599	0.0712	2.41
GEOM. MEAN	3.7	20.8	4.4	4.5	0.0260	0.0615	1.80
GEOM. STD. DEV.	3.0	1.9	1.1	1.1	4.6916	1.9829	2.62
1ST QUARTILE	1.0	13.4	4.1	4.2	0.0157	0.0381	0.97
2ND QUARTILE	3.8	21.4	4.4	4.5	0.0347	0.0612	2.02
3RD QUARTILE	11.4	33.9	4.7	4.8	0.0638	0.0875	3.42
VOL. WGT. MEAN	******	24.6	******	******	0.0446	0.0706	2.38

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	132	122	132	122	123	122	128
MAXIMUM	3.980	1.360	0.890	0.315	0.425	0.435	2.300
MINIMUM	0.000	0.000	0.010	0.000	0.000	0.000	0.002
RANGE	3.980	1.360	0.880	0.315	0.425	0.435	2.297
ARITH. MEAN	0.642	0.260	0.182	0.040	0.064	0.075	0.417
ARITH. STD. DEV	0.681	0.284	0.176	0.051	0.070	0.080	0.415
GEOM. MEAN	0.445	0.177	0.119	0.028	0.040	0.043	0.262
GEOM. STD. DEV.	2.503	3.025	2.672	3.552	2.987	3.503	3.068
1ST QUARTILE	0.270	0.070	0.070	0.005	0.025	0.015	0.150
2ND QUARTILE	0.490	0.150	0.130	0.022	0.045	0.047	0.305
3RD QUARTILE	0.745	0.345	0.240	0.055	0.080	0.098	0.547
VOL. WGT. MEAN	0.475	0.209	0.117	0.031	0.042	0.051	0.312

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

PERIOD OF REPORT : JAN 1,85 TO JAN 1,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	159	120	70	132	132	135	124
MAXIMUM	70.0	295.0	7.0	7.3	0.6026	0.6338	18.00
MINIMUM	0.0	5.1	3.6	3.2	0.0000	0.0001	0.30
RANGE	70.0	289.9	3.4	4.1	0.6025	0.6298	17.70
ARITH. MEAN	7.2	31.3	4.6	4.7	0.0561	0.0813	3.16
ARITH. STD. DEV	9.0	30.3	0.7	0.9	0.0794	0.0864	2.99
GEOM. MEAN	3.8	24.7	4.5	4.6	0.0193	0.0583	2.22
GEOM. STD. DEV.	3.5	1.9	1.1	1.2	8.9090	2.2312	2.39
1ST QUARTILE	1.6	14.9	4.2	4.2	0.0172	0.0372	1.40
2ND QUARTILE	4.5	24.8	4.4	4.4	0.0380	0.0615	2.38
3RD QUARTILE	8.6	37.8	4.6	4.8	0.0617	0.0900	3.95
VOL. WGT. MEAN	******	28.7	******	******	0.0421	0.0662	2.62

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	125	115	127	115	110	119	122
MAXIMUM	5.750	1.990	1.640	0.485	0.485	0.625	4.200
MINIMUM	0.070	0.000	0.000	0.002	0.000	0.002	0.035
RANGE	5.680	1.990	1.640	0.483	0.485	0.623	4.165
ARITH. MEAN	0.712	0.464	0.262	0.096	0.061	0.087	0.493
ARITH. STD. DEV	0.698	0.476	0.260	0.104	0.080	0.104	0.536
GEOM. MEAN	0.524	0.291	0.179	0.054	0.037	0.050	0.322
GEOM. STD. DEV.	2.182	2.910	2.560	3.179	3.734	3.024	2.589
1ST QUARTILE	0.330	0.140	0.100	0.025	0.008	0.030	0.173
2ND QUARTILE	0.545	0.260	0.170	0.050	0.040	0.050	0.342
3RD QUARTILE	0.840	0.710	0.290	0.135	0.075	0.100	0.627
VOL. WGT. MEAN	0.518	0.370	0.180	0.085	0.041	0.063	0.368

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

PERIOD OF REPORT : DEC 30,84 TO DEC 31,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES :	139	105	0	114	114	113	105
MAXIMUM :	53.0	71.3	******	7.5	0.0676	0.0962	12.50
MINIMUM :	0.0	1.3	******	4.2	0.0000	0.0135	0.02
RANGE :	53.0	70.0	******	3.3	0.0676	0.0827	12.47
ARITH. MEAN :	6.9	11.7	******	5.4	0.0112	0.0318	1.27
ARITH. STD. DEV :	9.5	8.9	******	0.8	0.0124	0.0154	1.48
GEOM. MEAN :	3.1	9.3	******	5.3	0.0042	0.0289	0.79
GEOM. STD. DEV. :	3.9	2.0	******	1.2	6.3280	1.5329	2.87
1ST QUARTILE :	1.2	5.2	******	4.8	0.0016	0.0202	0.40
2ND QUARTILE :	2.9	10.3	******	5.2	0.0068	0.0260	0.85
3RD QUARTILE :	8.3	15.5	******	5.7	0.0164	0.0390	1.65
VOL. WGT. MEAN :	******	9.8	******	******	0.0104	0.0301	1.04

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	105	98	105	98	98	98	102
MAXIMUM :	2.880	2.790	0.390	1.950	0.295	0.315	1.590
MINIMUM :	0.000	0.005	0.000	0.000	0.000	0.000	0.000
RANGE :	2.880	2.785	0.390	1.950	0.295	0.315	1.590
ARITH. MEAN :	0.287	0.343	0.077	0.070	0.051	0.049	0.307
ARITH. STD. DEV :	0.334	0.481	0.084	0.204	0.054	0.063	0.355
GEOM. MEAN :	0.207	0.167	0.077	0.026	0.041	0.028	0.261
GEOM. STD. DEV. :	3.030	3.537	2.825	4.068	3.362	3.512	3.034
1ST QUARTILE :	0.080	0.085	0.015	0.005	0.008	0.008	0.047
2ND QUARTILE :	0.210	0.160	0.030	0.025	0.032	0.032	0.163
3RD QUARTILE :	0.395	0.350	0.100	0.060	0.075	0.050	0.415
VOL. WGT. MEAN :	0.214	0.231	0.054	0.035	0.029	0.030	0.280

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10

PERIOD OF REPORT : JAN 7,85 TO DEC 29,85

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES :	83	58	13	64	64	63	61
MAXIMUM :	55.5	80.9	4.7	6.7	0.2754	0.3740	14.50
MINIMUM :	0.0	7.2	3.9	3.6	0.0002	0.0163	0.55
RANGE :	55.5	73.7	0.8	3.1	0.2752	0.3577	13.95
ARITH. MEAN :	11.0	37.9	4.2	4.3	0.0713	0.1081	4.11
ARITH. STD. DEV :	12.0	20.4	0.3	0.5	0.0549	0.0695	2.82
GEOM. MEAN :	5.9	32.1	4.2	4.3	0.0478	0.0892	3.22
GEOM. STD. DEV. :	3.4	1.8	1.1	1.1	3.3659	1.9013	2.10
1ST QUARTILE :	2.8	20.6	4.0	4.0	0.0302	0.0553	1.92
2ND QUARTILE :	6.9	35.6	4.2	4.2	0.0631	0.0943	3.67
3RD QUARTILE :	15.3	55.4	4.4	4.5	0.0989	0.1465	5.52
VOL. MGT. MEAN :	******	34.7	******	******	0.0637	0.0960	3.49

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	62	58	62	59	59	59	61
MAXIMUM :	2.350	2.800	0.810	0.285	0.195	0.385	1.550
MINIMUM :	0.070	0.005	0.000	0.000	0.000	0.000	0.035
RANGE :	2.280	2.795	0.810	0.285	0.195	0.385	1.515
ARITH. MEAN :	0.704	0.434	0.167	0.051	0.035	0.057	0.436
ARITH. STD. DEV :	0.485	0.559	0.173	0.062	0.043	0.080	0.304
GEOM. MEAN :	0.555	0.242	0.118	0.035	0.023	0.034	0.324
GEOM. STD. DEV. :	2.096	3.173	3.018	3.201	3.437	3.595	2.398
1ST QUARTILE :	0.345	0.145	0.030	0.008	0.005	0.008	0.212
2ND QUARTILE :	0.560	0.220	0.145	0.030	0.025	0.030	0.385
3RD QUARTILE :	0.895	0.505	0.200	0.062	0.052	0.057	0.595
VOL. MGT. MEAN :	0.558	0.281	0.127	0.033	0.022	0.047	0.388

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

PERIOD OF REPORT : JAN 1,85 TO JAN 1,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	197	123	79	142	142	142	129
MAXIMUM	116.6	94.8	5.2	7.7	0.5012	0.5840	16.25
MINIMUM	0.0	4.6	3.7	3.3	0.0000	0.0064	0.20
RANGE	116.6	90.2	1.5	4.4	0.5012	0.5776	16.05
ARITH. MEAN	5.4	29.5	4.3	4.5	0.0605	0.0881	3.07
ARITH. STD. DEV	10.5	20.1	0.3	0.8	0.0706	0.0828	2.98
GEOM. MEAN	2.3	23.5	4.3	4.5	0.0286	0.0657	1.99
GEOM. STD. DEV.	3.8	2.0	1.1	1.2	5.7232	2.1303	2.66
1ST QUARTILE	0.7	14.8	4.1	4.1	0.0200	0.0412	1.00
2ND QUARTILE	2.3	25.6	4.3	4.4	0.0380	0.0665	2.22
3RD QUARTILE	6.2	37.3	4.5	4.7	0.0776	0.1035	4.02
VOL. WGT. MEAN	******	26.5	******	******	0.0486	0.0742	2.51

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	130	101	130	104	104	104	121
MAXIMUM	4.950	2.580	1.350	0.445	0.245	0.615	2.250
MINIMUM	0.020	0.000	0.000	0.000	0.000	0.002	0.000
RANGE	4.930	2.580	1.350	0.445	0.245	0.613	2.250
ARITH. MEAN	0.693	0.353	0.206	0.048	0.039	0.074	0.374
ARITH. STD. DEV	0.721	0.465	0.213	0.076	0.046	0.085	0.435
GEOM. MEAN	0.461	0.194	0.144	0.022	0.027	0.045	0.206
GEOM. STD. DEV.	2.576	3.689	2.866	4.072	3.219	2.947	3.990
1ST QUARTILE	0.255	0.080	0.070	0.005	0.008	0.025	0.100
2ND QUARTILE	0.500	0.200	0.150	0.020	0.025	0.050	0.217
3RD QUARTILE	0.840	0.345	0.280	0.050	0.050	0.087	0.447
VOL. WGT. MEAN	0.465	0.248	0.120	0.034	0.028	0.051	0.302

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM 804

PERIOD OF REPORT : JAN 1,85 TO JAN 1,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	161	127	68	141	141	143	130
MAXIMUM	52.0	92.8	6.3	7.2	0.6761	0.7560	22.25
MINIMUM	0.0	5.1	3.6	3.2	0.0001	0.0136	0.38
RANGE	52.0	87.7	2.6	4.1	0.6760	0.7424	21.95
ARITH. MEAN	7.1	30.5	4.4	4.6	0.0606	0.0879	3.16
ARITH. STD. DEV	7.6	18.1	0.5	0.8	0.0896	0.1011	3.03
GEOM. MEAN	4.4	25.7	4.4	4.5	0.0257	0.0633	2.30
GEOM. STD. DEV.	2.7	1.8	1.1	1.2	6.1069	2.1376	2.22
1ST QUARTILE	2.1	17.7	4.2	4.2	0.0209	0.0401	1.40
2ND QUARTILE	4.5	26.2	4.3	4.4	0.0389	0.0642	2.20
3RD QUARTILE	8.4	38.5	4.5	4.7	0.0661	0.0933	3.67
VOL. WGT. MEAN	******	29.1	******	******	0.0490	0.0757	2.84

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	131	117	132	117	119	119	125
MAXIMUM	4.200	2.910	6.200	0.630	0.210	1.740	2.500
MINIMUM	0.080	0.000	0.010	0.000	0.000	0.000	0.040
RANGE	4.120	2.910	6.190	0.630	0.210	1.740	2.460
ARITH. MEAN	0.739	0.423	0.331	0.084	0.035	0.097	0.501
ARITH. STD. DEV	0.647	0.536	0.622	0.112	0.040	0.199	0.440
GEOM. MEAN	0.546	0.261	0.159	0.044	0.029	0.039	0.368
GEOM. STD. DEV.	2.189	3.018	3.363	3.523	3.172	4.016	2.216
1ST QUARTILE	0.325	0.125	0.090	0.025	0.008	0.020	0.207
2ND QUARTILE	0.500	0.245	0.160	0.045	0.025	0.040	0.380
3RD QUARTILE	0.875	0.465	0.360	0.085	0.045	0.085	0.622
VOL. WGT. MEAN	0.538	0.295	0.219	0.059	0.024	0.057	0.391

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILMER/DAILY/AEROCHEM 89A

PERIOD OF REPORT : OCT 24,85 TO JAN 1,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	42	25	0	27	27	27	26
MAXIMUM	25.8	77.0	******	5.4	0.3467	0.4260	7.90
MINIMUM	0.0	4.5	******	3.5	0.0043	0.0230	0.25
RANGE	25.8	72.5	******	1.9	0.3425	0.4030	7.65
ARITH. MEAN	4.1	27.1	******	4.5	0.0586	0.0881	1.95
ARITH. STD. DEV	5.8	20.0	******	0.5	0.0695	0.0823	2.01
GEOM. MEAN	2.3	20.4	******	4.4	0.0345	0.0668	1.18
GEOM. STD. DEV.	2.8	2.3	******	1.1	2.9950	2.0588	2.82
1ST QUARTILE	0.0	14.0	******	4.1	0.0149	0.0365	0.45
2ND QUARTILE	1.6	21.6	******	4.4	0.0359	0.0623	1.13
3RD QUARTILE	6.2	33.9	******	4.7	0.0823	0.1200	2.65
VOL. WGT. MEAN	******	23.0	******	******	0.0411	0.0671	1.50

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	26	24	26	24	24	24	25
MAXIMUM	5.550	0.860	1.110	0.120	0.085	0.505	1.830
MINIMUM	0.070	0.005	0.000	0.000	0.000	0.005	0.002
RANGE	5.480	0.855	1.110	0.120	0.085	0.500	1.827
ARITH. MEAN	0.832	0.270	0.261	0.028	0.028	0.137	0.246
ARITH. STD. DEV	1.080	0.261	0.267	0.033	0.028	0.140	0.409
GEOM. MEAN	0.480	0.151	0.165	0.017	0.030	0.087	0.090
GEOM. STD. DEV.	3.020	3.615	3.333	3.405	3.524	2.806	4.492
1ST QUARTILE	0.170	0.100	0.070	0.005	0.004	0.042	0.027
2ND QUARTILE	0.565	0.125	0.145	0.015	0.017	0.080	0.077
3RD QUARTILE	0.960	0.395	0.405	0.037	0.052	0.170	0.165
VOL. WGT. MEAN	0.517	0.174	0.209	0.016	0.026	0.089	0.171

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

PART IV

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 31,84 TO JAN 1,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	720	510	340	574	574	577	540
MAXIMUM	170.0	97.1	7.2	7.8	0.5012	0.5840	16.80
MINIMUM	0.0	2.4	3.3	3.3	0.0000	0.0035	0.05
RANGE	170.0	94.7	3.9	4.5	0.5012	0.5805	16.75
ARITH. MEAN	6.1	27.6	4.4	4.5	0.0566	0.0851	2.75
ARITH. STD. DEV	10.2	17.9	0.4	0.7	0.0632	0.0751	2.69
GEOM. MEAN	2.8	22.5	4.3	4.5	0.0291	0.0652	1.78
GEOM. STD. DEV.	3.8	1.9	1.1	1.1	4.8098	2.0432	2.69
1ST QUARTILE	1.0	14.9	4.1	4.2	0.0200	0.0422	0.95
2ND QUARTILE	3.1	23.6	4.3	4.4	0.0389	0.0649	1.95
3RD QUARTILE	8.0	35.4	4.5	4.7	0.0692	0.0986	3.42
VOL. WGT. MEAN	******	25.2	******	******	0.0456	0.0717	2.37

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	541	469	541	473	474	474	521
MAXIMUM	4.950	2.850	1.810	0.445	0.425	0.615	3.650
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	4.950	2.850	1.810	0.445	0.425	0.615	3.650
ARITH. MEAN	0.665	0.319	0.186	0.043	0.047	0.073	0.367
ARITH. STD. DEV	0.678	0.425	0.193	0.064	0.058	0.082	0.436
GEOM. MEAN	0.453	0.179	0.125	0.025	0.031	0.046	0.208
GEOM. STD. DEV.	2.549	3.466	2.795	3.707	3.327	3.149	3.553
1ST QUARTILE	0.255	0.080	0.070	0.005	0.008	0.025	0.100
2ND QUARTILE	0.500	0.170	0.130	0.020	0.030	0.050	0.225
3RD QUARTILE	0.805	0.370	0.240	0.050	0.060	0.095	0.473
VOL. WGT. MEAN	0.465	0.225	0.115	0.031	0.034	0.050	0.299

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 30,84 TO JAN 1,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	312	249	0	263	263	263	250
MAXIMUM	53.6	75.3	******	7.5	0.1318	0.1760	12.50
MINIMUM	0.0	1.3	******	3.9	0.0000	0.0073	0.00
RANGE	53.6	74.0	******	3.6	0.1318	0.1687	12.50
ARITH. MEAN	7.5	12.3	******	5.4	0.0115	0.0321	1.47
ARITH. STD. DEV	9.4	10.4	******	0.8	0.0162	0.0205	1.67
GEOM. MEAN	3.5	9.6	******	5.4	0.0037	0.0282	0.92
GEOM. STD. DEV.	4.0	2.0	******	1.2	6.8388	1.6105	2.82
1ST QUARTILE	1.4	6.1	******	4.8	0.0010	0.0196	0.47
2ND QUARTILE	3.9	10.3	******	5.2	0.0065	0.0263	1.00
3RD QUARTILE	9.6	14.8	******	6.0	0.0153	0.0374	1.77
VOL. WGT. MEAN	******	9.8	******	******	0.0096	0.0293	1.11

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	247	235	249	235	236	235	244
MAXIMUM	2.880	2.790	1.510	1.950	0.755	1.250	2.950
MINIMUM	0.000	0.005	0.000	0.000	0.000	0.000	0.000
RANGE	2.880	2.785	1.510	1.950	0.755	1.250	2.950
ARITH. MEAN	0.288	0.400	0.100	0.062	0.054	0.072	0.318
ARITH. STD. DEV	0.308	0.469	0.172	0.141	0.080	0.127	0.439
GEOM. MEAN	0.208	0.227	0.082	0.029	0.038	0.036	0.254
GEOM. STD. DEV.	2.947	3.153	3.062	3.671	3.238	3.560	3.636
1ST QUARTILE	0.095	0.110	0.015	0.008	0.010	0.009	0.027
2ND QUARTILE	0.215	0.240	0.070	0.030	0.035	0.040	0.163
3RD QUARTILE	0.410	0.450	0.110	0.065	0.060	0.075	0.425
VOL. WGT. MEAN	0.208	0.293	0.069	0.039	0.037	0.051	0.261

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 31,84 TO JAN 1,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	353	255	41	288	288	287	271
MAXIMUM	90.2	93.0	6.2	7.3	0.4169	0.5590	16.05
MINIMUM	0.0	4.5	3.8	3.4	0.0000	0.0163	0.07
RANGE	90.2	88.5	2.4	4.0	0.4168	0.5427	15.98
ARITH. MEAN	8.4	36.5	4.4	4.3	0.0736	0.1099	3.43
ARITH. STD. DEV	10.7	21.4	0.4	0.5	0.0608	0.0758	2.89
GEOM. MEAN	4.2	29.8	4.3	4.3	0.0483	0.0889	2.35
GEOM. STD. DEV.	3.4	2.0	1.1	1.1	3.2574	1.9507	2.60
1ST QUARTILE	1.6	18.1	4.1	4.0	0.0306	0.0557	1.30
2ND QUARTILE	4.4	32.5	4.4	4.2	0.0617	0.0946	2.55
3RD QUARTILE	11.2	50.9	4.5	4.5	0.1035	0.1460	4.85
VOL. WGT. MEAN	******	30.3	******	******	0.0553	0.0856	2.69

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	272	248	272	252	253	252	259
MAXIMUM	5.550	2.800	1.640	0.960	0.525	1.000	3.750
MINIMUM	0.025	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	5.525	2.800	1.640	0.960	0.525	1.000	3.750
ARITH. MEAN	0.810	0.347	0.222	0.054	0.039	0.079	0.389
ARITH. STD. DEV	0.704	0.424	0.236	0.088	0.059	0.112	0.441
GEOM. MEAN	0.571	0.202	0.142	0.032	0.032	0.043	0.240
GEOM. STD. DEV.	2.450	2.989	3.118	3.602	3.704	3.826	3.073
1ST QUARTILE	0.320	0.100	0.070	0.008	0.005	0.010	0.110
2ND QUARTILE	0.630	0.190	0.150	0.025	0.025	0.040	0.265
3RD QUARTILE	1.130	0.405	0.300	0.062	0.055	0.103	0.507
VOL. WGT. MEAN	0.523	0.224	0.135	0.032	0.023	0.048	0.297

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 31,84 TO JAN 1,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	569	467	281	508	508	512	482
MAXIMUM	70.0	295.0	7.0	7.6	0.6761	0.7560	22.25
MINIMUM	0.0	5.0	3.6	3.2	0.0000	0.0081	0.15
RANGE	70.0	290.0	3.4	4.4	0.6761	0.7478	22.10
ARITH. MEAN	7.5	31.8	4.4	4.6	0.0585	0.0856	3.40
ARITH. STD. DEV	8.3	21.6	0.6	0.9	0.0742	0.0838	3.00
GEOM. MEAN	4.4	26.7	4.4	4.6	0.0234	0.0639	2.50
GEOM. STD. DEV.	3.0	1.8	1.1	1.2	7.6486	2.1218	2.24
1ST QUARTILE	2.1	18.6	4.1	4.2	0.0214	0.0438	1.55
2ND QUARTILE	4.6	27.2	4.3	4.4	0.0427	0.0678	2.57
3RD QUARTILE	9.4	40.4	4.5	4.7	0.0676	0.0980	4.17
VOL. WGT. MEAN	******	28.9	******	******	0.0481	0.0739	2.83

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	485	441	487	442	450	450	473
MAXIMUM	5.750	3.060	6.200	0.630	1.300	1.740	4.200
MINIMUM	0.025	0.000	0.000	0.000	0.000	0.000	0.005
RANGE	5.725	3.060	6.200	0.630	1.300	1.740	4.195
ARITH. MEAN	0.739	0.482	0.293	0.090	0.065	0.097	0.478
ARITH. STD. DEV	0.686	0.549	0.398	0.106	0.094	0.132	0.476
GEOM. MEAN	0.542	0.290	0.179	0.051	0.042	0.055	0.322
GEOM. STD. DEV.	2.222	3.092	2.834	3.230	3.451	3.232	2.554
1ST QUARTILE	0.350	0.140	0.110	0.027	0.010	0.030	0.185
2ND QUARTILE	0.545	0.270	0.180	0.050	0.040	0.060	0.350
3RD QUARTILE	0.880	0.585	0.340	0.098	0.085	0.110	0.595
VOL. WGT. MEAN	0.524	0.340	0.197	0.067	0.044	0.068	0.356

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

PART V

SUMMARY STATISTICS OF WET DEPOSITION BY STATION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

PERIOD OF REPORT : JAN 6, 85 TO DEC 31,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	146	85	135	134	128	127	110
MAXIMUM	170.0	6.6138	5.5011	9.8260	297.50	32.300	17.000
MINIMUM	0.0	0.0000	0.0000	0.0010	0.08	0.000	0.000
RANGE	170.0	6.6138	5.5011	9.8250	297.42	32.300	17.000
ARITH. MEAN	7.3	0.5296	0.3192	0.5214	19.09	3.499	2.312
ARITH. STD. DEV	15.5	0.8541	0.6012	1.0074	34.39	4.293	3.439
GEOM. MEAN	3.1	0.2401	0.0828	0.2096	6.79	1.874	1.123
GEOM. STD. DEV.	4.0	4.9381	10.1712	4.4434	5.01	3.528	3.312
1ST QUARTILE	1.2	0.1268	0.0289	0.0864	2.42	0.884	0.438
2ND QUARTILE	3.7	0.2797	0.1325	0.2759	7.51	2.217	1.050
3RD QUARTILE	7.3	0.5282	0.3674	0.5572	23.21	4.385	2.323
VOL. WGT. MEAN	*******	0.3695	0.3121	0.5060	17.72	3.224	1.946

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	128	110	109	110	122
MAXIMUM	16.422	2.840	5.072	9.902	29.750
MINIMUM	0.000	0.000	0.000	0.034	0.000
RANGE	16.422	2.840	5.072	9.868	29.750
ARITH. MEAN	0.913	0.262	0.312	0.527	2.500
ARITH. STD. DEV	1.595	0.424	0.749	1.073	4.717
GEOM. MEAN	0.480	0.114	0.095	0.283	0.812
GEOM. STD. DEV.	3.340	4.067	4.876	2.729	5.549
1ST QUARTILE	0.240	0.036	0.026	0.142	0.220
2ND QUARTILE	0.526	0.082	0.079	0.271	1.013
3RD QUARTILE	1.091	0.283	0.254	0.544	2.557
VOL. WGT. MEAN	0.848	0.221	0.260	0.444	2.266

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

PERIOD OF REPORT : JAN 1, 85 TO DEC 30,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	123	11	117	117	106	106	97
MAXIMUM :	90.2	1.7800	3.3728	4.6543	126.28	25.162	12.126
MINIMUM :	0.0	0.0764	0.0006	0.0102	0.30	0.214	0.000
RANGE :	90.2	1.7035	3.3722	4.6442	125.98	24.948	12.126
ARITH. MEAN :	7.8	0.7155	0.4305	0.6763	19.45	4.129	1.519
ARITH. STD. DEV :	11.3	0.5268	0.5155	0.7878	24.86	3.956	1.957
GEOM. MEAN :	3.8	0.5354	0.2203	0.3815	9.15	2.688	0.834
GEOM. STD. DEV. :	3.7	2.4058	3.9771	3.2768	3.90	2.706	3.200
1ST QUARTILE :	1.9	0.3166	0.1096	0.2134	3.40	1.237	0.393
2ND QUARTILE :	4.0	0.4920	0.2680	0.4236	11.08	2.987	0.840
3RD QUARTILE :	9.6	0.9802	0.5299	0.7888	23.00	5.470	1.738
VOL. WGT. MEAN :	*******	0.4776	0.4227	0.6641	17.92	3.804	1.297

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	106	98	99	98	97
MAXIMUM :	7.111	3.648	1.995	2.735	12.160
MINIMUM :	0.000	0.000	0.000	0.000	0.000
RANGE :	7.111	3.648	1.995	2.735	12.160
ARITH. MEAN :	1.114	0.237	0.160	0.340	1.919
ARITH. STD. DEV :	1.259	0.453	0.287	0.527	2.452
GEOM. MEAN :	0.709	0.141	0.134	0.172	0.993
GEOM. STD. DEV. :	2.897	3.530	3.866	3.490	3.622
1ST QUARTILE :	0.350	0.029	0.011	0.065	0.304
2ND QUARTILE :	0.684	0.101	0.060	0.150	1.206
3RD QUARTILE :	1.508	0.292	0.216	0.334	2.304
VOL. WGT. MEAN :	1.026	0.203	0.139	0.292	1.656

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #06

PERIOD OF REPORT : JAN 1, 85 TO JAN 1,86

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	211	103	164	167	151	152	136
MAXIMUM	37.8	2.2956	2.1900	2.8730	99.45	13.728	12.716
MINIMUM	0.0	0.0032	0.0001	0.0067	0.24	0.042	0.000
RANGE	37.8	2.2924	2.1899	2.8663	99.21	13.686	12.716
ARITH. MEAN	5.4	0.4839	0.3011	0.4696	15.42	3.352	1.387
ARITH. STD. DEV	6.9	0.4691	0.3602	0.5223	18.95	3.210	2.117
GEOM. MEAN	2.4	0.2964	0.1255	0.2392	6.78	1.812	0.575
GEOM. STD. DEV.	4.2	3.0574	5.4250	3.6997	4.20	3.681	4.170
1ST QUARTILE	0.8	0.1596	0.0461	0.0865	2.01	0.875	0.189
2ND QUARTILE	2.6	0.3596	0.1573	0.2732	7.33	2.127	0.440
3RD QUARTILE	7.8	0.6636	0.4144	0.6445	22.21	5.324	1.778
VOL. WGT. MEAN	*******	0.3040	0.2516	0.3956	11.83	2.585	0.991

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	151	137	138	138	150
MAXIMUM	6.912	1.878	3.120	4.128	14.396
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	6.912	1.878	3.120	4.128	14.396
ARITH. MEAN	0.765	0.213	0.233	0.310	1.942
ARITH. STD. DEV	0.934	0.350	0.381	0.505	2.667
GEOM. MEAN	0.445	0.102	0.152	0.173	0.719
GEOM. STD. DEV.	3.249	4.157	3.345	3.272	5.279
1ST QUARTILE	0.175	0.021	0.038	0.065	0.209
2ND QUARTILE	0.433	0.057	0.105	0.149	0.828
3RD QUARTILE	1.019	0.246	0.279	0.316	2.884
VOL. WGT. MEAN	0.587	0.151	0.166	0.220	1.481

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16

PERIOD OF REPORT : JAN 6, 85 TO DEC 29,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	53	0	48	48	47	47	47
MAXIMUM	37.2	********	0.5574	1.2858	103.74	9.450	14.700
MINIMUM	0.1	********	0.0001	0.0080	0.20	0.060	0.032
RANGE	37.1	********	0.5573	1.2778	103.54	9.390	14.668
ARITH. MEAN	9.2	********	0.0996	0.3028	14.77	2.722	3.419
ARITH. STD. DEV	8.4	********	0.1474	0.2930	17.24	2.477	3.702
GEOM. MEAN	5.1	********	0.0179	0.1752	8.60	1.548	1.720
GEOM. STD. DEV.	4.0	********	10.9621	3.3326	3.32	3.554	4.083
1ST QUARTILE	3.2	********	0.0028	0.0928	5.41	0.555	0.786
2ND QUARTILE	7.1	********	0.0338	0.1822	9.75	2.212	1.995
3RD QUARTILE	12.7	********	0.1418	0.5298	16.28	3.540	4.066
VOL. WGT. MEAN	********	********	0.0941	0.2862	13.67	2.520	3.169

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	46	47	47	46	46
MAXIMUM	25.116	2.275	9.966	19.520	17.745
MINIMUM	0.000	0.000	0.021	0.008	0.000
RANGE	25.116	2.275	9.945	19.511	17.745
ARITH. MEAN	1.441	0.564	0.686	1.171	3.608
ARITH. STD. DEV	3.810	0.582	1.470	3.041	4.149
GEOM. MEAN	0.629	0.324	0.325	0.348	1.524
GEOM. STD. DEV.	3.053	3.747	3.156	4.376	6.501
1ST QUARTILE	0.339	0.114	0.150	0.145	0.292
2ND QUARTILE	0.618	0.330	0.371	0.310	2.558
3RD QUARTILE	1.053	0.834	0.635	0.895	4.733
VOL. WGT. MEAN	1.315	0.523	0.636	1.070	3.275

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

PERIOD OF REPORT : JAN 7, 85 TO DEC 23,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	120	0	101	102	98	95	90
MAXIMUM :	53.6	********	0.5730	1.4006	51.70	10.434	19.106
MINIMUM :	0.0	********	0.0001	0.0015	0.00	0.000	0.040
RANGE :	53.6	********	0.5729	1.3991	51.70	10.434	19.066
ARITH. MEAN :	7.3	********	0.0682	0.2218	8.35	1.427	3.019
ARITH. STD. DEV :	9.8	********	0.1158	0.2675	10.06	1.651	3.797
GEOM. MEAN :	3.3	********	0.0162	0.1189	4.17	0.852	1.570
GEOM. STD. DEV. :	4.0	********	7.9818	3.2583	3.70	3.492	3.340
1ST QUARTILE :	1.5	********	0.0040	0.0573	1.55	0.307	0.686
2ND QUARTILE :	3.4	********	0.0228	0.1119	4.38	0.822	1.519
3RD QUARTILE :	8.3	********	0.0757	0.2578	10.85	1.937	3.248
VOL. WGT. MEAN :	*******	********	0.0602	0.1978	7.19	1.195	2.409

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	98	90	91	91	96
MAXIMUM :	4.640	2.563	3.961	6.090	15.762
MINIMUM :	0.000	0.002	0.000	0.000	0.000
RANGE :	4.640	2.561	3.961	6.090	15.762
ARITH. MEAN :	0.360	0.293	0.246	0.322	1.584
ARITH. STD. DEV :	0.581	0.484	0.491	0.668	2.636
GEOM. MEAN :	0.267	0.131	0.134	0.185	0.877
GEOM. STD. DEV. :	3.308	3.550	3.473	2.801	3.991
1ST QUARTILE :	0.039	0.064	0.040	0.084	0.013
2ND QUARTILE :	0.153	0.112	0.112	0.180	0.506
3RD QUARTILE :	0.465	0.281	0.209	0.309	2.016
VOL. WGT. MEAN :	0.310	0.234	0.199	0.260	1.360

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

PERIOD OF REPORT : JAN 13, 85 TO DEC 28,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	105	17	80	80	78	78	69
MAXIMUM	44.2	2.0944	2.5365	3.4693	121.50	24.310	18.480
MINIMUM	0.0	0.0028	0.0000	0.0150	1.44	0.096	0.270
RANGE	44.2	2.0917	2.5364	3.4542	120.06	24.214	18.210
ARITH. MEAN	8.7	0.5750	0.5186	0.8029	27.47	5.388	2.774
ARITH. STD. DEV	9.8	0.5260	0.5835	0.8244	28.01	5.182	3.036
GEOM. MEAN	4.6	0.2884	0.2377	0.4649	16.22	3.378	1.775
GEOM. STD. DEV.	3.3	5.6756	5.8094	3.1585	3.01	2.865	2.642
1ST QUARTILE	1.4	0.2772	0.1119	0.1804	7.13	1.680	0.858
2ND QUARTILE	4.6	0.4651	0.3384	0.5404	17.76	3.461	1.791
3RD QUARTILE	12.0	0.6194	0.6451	1.0877	36.15	7.479	3.575
VOL. WGT. MEAN	*******	0.4177	0.4554	0.7050	23.64	4.637	2.209

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	78	71	71	71	76
MAXIMUM	11.256	3.542	3.757	6.633	14.841
MINIMUM	0.016	0.033	0.000	0.000	0.060
RANGE	11.240	3.509	3.757	6.633	14.781
ARITH. MEAN	1.325	0.456	0.332	0.579	3.506
ARITH. STD. DEV	1.817	0.648	0.493	0.920	3.459
GEOM. MEAN	0.698	0.254	0.213	0.323	1.995
GEOM. STD. DEV.	3.206	2.840	2.872	3.240	3.338
1ST QUARTILE	0.326	0.120	0.074	0.124	0.947
2ND QUARTILE	0.592	0.240	0.200	0.290	2.204
3RD QUARTILE	1.636	0.521	0.402	0.774	5.557
VOL. WGT. MEAN	1.140	0.364	0.264	0.462	2.951

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

PERIOD OF REPORT : JAN 1, 85 TO DEC 28,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	142	82	136	135	130	131	115
MAXIMUM	59.2	4.5716	3.7160	5.2962	177.60	32.396	17.168
MINIMUM	0.1	0.0013	0.0000	0.0016	0.93	0.100	0.200
RANGE	59.1	4.5703	3.7159	5.2946	176.67	32.296	16.968
ARITH. MEAN	7.5	0.6286	0.3790	0.5902	23.09	4.133	3.086
ARITH. STD. DEV	8.4	0.7040	0.5129	0.7589	26.70	4.149	3.135
GEOM. MEAN	4.5	0.3175	0.0833	0.2934	13.41	2.693	2.019
GEOM. STD. DEV.	2.9	4.6139	16.3423	3.8090	3.07	2.875	2.585
1ST QUARTILE	2.2	0.2011	0.0469	0.1261	6.88	1.633	1.016
2ND QUARTILE	4.6	0.3668	0.2095	0.3270	14.98	3.148	2.166
3RD QUARTILE	9.6	0.8022	0.4725	0.8160	32.04	5.525	3.652
VOL. WGT. MEAN	*******	0.4378	0.3676	0.5708	22.05	3.881	2.634

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	130	117	118	118	128
MAXIMUM	11.070	2.565	4.550	6.888	23.680
MINIMUM	0.029	0.000	0.000	0.000	0.010
RANGE	11.041	2.565	4.550	6.888	23.670
ARITH. MEAN	1.695	0.554	0.596	0.724	2.763
ARITH. STD. DEV	1.566	0.569	0.671	0.863	3.142
GEOM. MEAN	1.169	0.353	0.369	0.494	1.557
GEOM. STD. DEV.	2.559	2.730	2.713	2.469	3.450
1ST QUARTILE	0.664	0.178	0.171	0.294	0.810
2ND QUARTILE	1.402	0.343	0.420	0.534	1.946
3RD QUARTILE	2.107	0.665	0.709	0.832	3.590
VOL. WGT. MEAN	1.580	0.477	0.515	0.625	2.539

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

PERIOD OF REPORT : DEC 31, 84 TO DEC 25,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	107	61	99	99	98	98	94
MAXIMUM	40.0	2.0822	1.9183	2.6904	95.70	12.220	37.120
MINIMUM	0.1	0.0024	0.0002	0.0163	1.14	0.462	0.000
RANGE	39.9	2.0797	1.9181	2.6741	94.56	11.758	37.120
ARITH. MEAN	8.6	0.5974	0.4465	0.6585	24.71	4.411	2.975
ARITH. STD. DEV	8.4	0.5480	0.4434	0.6058	21.49	3.027	4.551
GEOM. MEAN	5.4	0.3365	0.2192	0.4306	17.19	3.367	1.581
GEOM. STD. DEV.	2.8	4.0236	5.5767	2.7381	2.44	2.217	3.284
1ST QUARTILE	2.6	0.2049	0.1451	0.2422	8.70	2.236	0.564
2ND QUARTILE	5.8	0.3853	0.2953	0.4347	16.68	3.669	1.919
3RD QUARTILE	11.5	0.8021	0.5994	0.8555	32.59	6.095	3.532
VOL. WGT. MEAN	********	0.4852	0.4587	0.6763	25.12	4.485	2.926

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	98	93	95	94	98
MAXIMUM	11.395	6.380	2.907	7.847	12.542
MINIMUM	0.069	0.000	0.000	0.021	0.073
RANGE	11.326	6.380	2.907	7.826	12.469
ARITH. MEAN	1.460	0.491	0.381	0.590	2.666
ARITH. STD. DEV	1.605	0.749	0.529	0.919	2.358
GEOM. MEAN	0.894	0.277	0.221	0.319	1.812
GEOM. STD. DEV.	2.854	3.148	3.236	3.147	2.603
1ST QUARTILE	0.444	0.125	0.082	0.150	0.914
2ND QUARTILE	0.882	0.314	0.197	0.345	2.142
3RD QUARTILE	2.055	0.583	0.430	0.680	3.958
VOL. WGT. MEAN	1.484	0.478	0.378	0.581	2.710

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

PERIOD OF REPORT : JAN 1, 85 TO DEC 31,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	166	73	133	134	132	132	122
MAXIMUM	32.0	3.1210	2.4227	3.8430	135.72	20.580	17.556
MINIMUM	0.0	0.0029	0.0000	0.0109	0.66	0.000	0.000
RANGE	32.0	3.1182	2.4227	3.8321	135.06	20.580	17.556
ARITH. MEAN	6.7	0.5345	0.3652	0.5799	19.79	3.954	1.807
ARITH. STD. DEV	7.1	0.5946	0.4462	0.6302	23.37	3.628	2.575
GEOM. MEAN	3.7	0.2778	0.1327	0.3159	9.56	2.327	0.930
GEOM. STD. DEV.	3.0	3.8379	7.3341	3.4404	3.80	3.270	3.376
1ST QUARTILE	1.0	0.1214	0.0518	0.1244	3.48	1.061	0.329
2ND QUARTILE	3.8	0.3557	0.1941	0.3850	11.49	2.842	0.749
3RD QUARTILE	11.4	0.6824	0.4665	0.7857	25.11	6.352	2.265
VOL. WGT. MEAN	********	0.3629	0.2984	0.4721	15.89	3.174	1.395

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	132	122	123	122	128
MAXIMUM	7.992	1.710	5.040	4.536	11.715
MINIMUM	0.070	0.000	0.000	0.000	0.028
RANGE	7.922	1.710	5.040	4.536	11.687
ARITH. MEAN	0.977	0.268	0.366	0.434	2.643
ARITH. STD. DEV	1.068	0.395	0.531	0.655	2.556
GEOM. MEAN	0.632	0.140	0.232	0.240	1.452
GEOM. STD. DEV.	2.585	3.747	2.535	3.030	3.685
1ST QUARTILE	0.299	0.032	0.116	0.101	0.838
2ND QUARTILE	0.660	0.084	0.231	0.236	1.652
3RD QUARTILE	1.232	0.308	0.397	0.467	4.063
VOL. WGT. MEAN	0.785	0.207	0.282	0.338	2.084

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

PERIOD OF REPORT : JAN 1, 85 TO JAN 1,86

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	159	70	132	135	124	125	115
MAXIMUM	70.0	1.9545	1.8255	2.5472	143.52	21.827	57.400
MINIMUM	0.0	0.0008	0.0000	0.0086	0.39	0.072	0.000
RANGE	70.0	1.9537	1.8255	2.5386	143.13	21.755	57.400
ARITH. MEAN	7.2	0.4821	0.3463	0.5390	23.31	4.569	3.473
ARITH. STD. DEV	9.0	0.4791	0.3901	0.5653	25.28	4.071	6.039
GEOM. MEAN	3.8	0.2155	0.0977	0.2907	13.20	3.060	1.833
GEOM. STD. DEV.	3.5	5.8073	12.5257	3.6099	3.27	2.736	3.173
1ST QUARTILE	1.6	0.1584	0.0748	0.1523	6.82	1.621	0.769
2ND QUARTILE	4.5	0.3370	0.2058	0.3270	14.39	3.481	1.929
3RD QUARTILE	8.6	0.6721	0.4806	0.7189	30.65	5.856	4.273
VOL. WGT. MEAN	*******	0.3217	0.3016	0.4748	18.82	3.718	2.654

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	127	115	118	119	122
MAXIMUM	16.425	21.350	3.870	12.262	28.405
MINIMUM	0.000	0.015	0.000	0.033	0.052
RANGE	16.425	21.335	3.870	12.229	28.353
ARITH. MEAN	1.565	0.794	0.376	0.580	3.312
ARITH. STD. DEV	1.963	2.053	0.518	1.183	3.775
GEOM. MEAN	0.996	0.356	0.217	0.321	1.977
GEOM. STD. DEV.	2.623	3.399	3.573	2.803	3.010
1ST QUARTILE	0.527	0.127	0.068	0.175	0.915
2ND QUARTILE	1.004	0.418	0.236	0.319	2.226
3RD QUARTILE	1.671	0.929	0.415	0.634	4.025
VOL. WGT. MEAN	1.292	0.607	0.292	0.453	2.636

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

PERIOD OF REPORT : DEC 30, 84 TO DEC 31,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	139	0	114	113	105	105	98
MAXIMUM	53.0	********	0.7981	1.5720	56.64	10.800	25.536
MINIMUM	0.0	********	0.0000	0.0060	0.07	0.000	0.062
RANGE	53.0	********	0.7981	1.5660	56.57	10.800	25.474
ARITH. MEAN	6.9	********	0.0852	0.2494	9.04	1.872	2.117
ARITH. STD. DEV	9.5	********	0.1413	0.3050	12.01	2.386	3.620
GEOM. MEAN	3.1	********	0.0189	0.1309	3.89	0.944	0.910
GEOM. STD. DEV.	3.9	********	9.6167	3.2523	4.08	3.901	3.645
1ST QUARTILE	1.2	********	0.0047	0.0537	1.41	0.354	0.352
2ND QUARTILE	2.9	********	0.0273	0.1264	3.76	0.878	0.850
3RD QUARTILE	8.3	********	0.0854	0.3015	10.31	2.760	2.373
VOL. WGT. MEAN	*******	********	0.0721	0.2093	7.19	1.490	1.607

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	105	98	98	98	102
MAXIMUM	4.240	3.168	1.632	2.915	38.690
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	4.240	3.168	1.632	2.915	38.690
ARITH. MEAN	0.474	0.323	0.263	0.276	2.469
ARITH. STD. DEV	0.738	0.539	0.320	0.465	4.885
GEOM. MEAN	0.301	0.133	0.187	0.139	1.063
GEOM. STD. DEV.	3.314	4.018	3.141	3.521	4.135
1ST QUARTILE	0.062	0.037	0.052	0.052	0.162
2ND QUARTILE	0.180	0.112	0.156	0.117	0.957
3RD QUARTILE	0.508	0.336	0.373	0.317	2.430
VOL. WGT. MEAN	0.377	0.245	0.203	0.210	1.943

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10

PERIOD OF REPORT : JAN 7, 85 TO DEC 29,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	83	13	64	63	61	62	58
MAXIMUM :	55.5	1.8644	4.8662	7.1526	253.89	37.128	18.564
MINIMUM :	.0	0.1225	0.0002	0.0187	0.58	0.074	0.017
RANGE :	55.5	1.7419	4.8660	7.1339	253.31	37.054	18.546
ARITH. MEAN :	11.0	0.6305	0.6745	1.0309	38.60	6.069	3.209
ARITH. STD. DEV :	12.0	0.4963	0.8997	1.2532	46.53	7.046	3.627
GEOM. MEAN :	5.9	0.4825	0.2977	0.5677	21.77	3.602	1.709
GEOM. STD. DEV. :	3.4	2.1740	5.2180	3.2489	3.09	2.944	3.840
1ST QUARTILE :	2.8	0.2887	0.1596	0.2684	10.40	1.848	0.861
2ND QUARTILE :	6.9	0.5033	0.2980	0.5449	20.46	3.581	1.867
3RD QUARTILE :	15.3	0.6087	0.8908	1.2441	43.68	7.122	3.561
VOL. WGT. MEAN :	*******	0.6450	0.7005	1.0563	38.43	6.137	3.090

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	62	59	59	59	61
MAXIMUM :	14.742	2.730	1.320	6.552	23.275
MINIMUM :	0.000	0.000	0.000	0.000	0.025
RANGE :	14.742	2.730	1.320	6.552	23.250
ARITH. MEAN :	1.377	0.375	0.253	0.531	4.288
ARITH. STD. DEV :	2.321	0.489	0.306	1.119	4.929
GEOM. MEAN :	0.667	0.223	0.149	0.204	2.209
GEOM. STD. DEV. :	3.474	3.477	3.775	4.263	3.662
1ST QUARTILE :	0.197	0.085	0.045	0.042	0.963
2ND QUARTILE :	0.612	0.203	0.141	0.168	2.260
3RD QUARTILE :	1.368	0.370	0.321	0.441	5.568
VOL. WGT. MEAN :	1.393	0.363	0.245	0.515	4.266

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

PERIOD OF REPORT : JAN 1, 85 TO JAN 1,86

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	197	79	142	142	129	130	101
MAXIMUM	116.6	5.5808	4.6419	8.4185	268.18	30.316	15.168
MINIMUM	0.0	0.0191	0.0000	0.0064	0.21	0.090	0.000
RANGE	116.6	5.5618	4.6419	8.4121	267.97	30.226	15.168
ARITH. MEAN	5.4	0.5592	0.3371	0.5148	18.77	3.462	2.174
ARITH. STD. DEV	10.5	0.7595	0.5668	0.8853	30.46	4.278	3.242
GEOM. MEAN	2.3	0.3240	0.1036	0.2375	8.16	1.862	0.958
GEOM. STD. DEV.	3.8	2.9349	8.6050	3.6740	4.03	3.317	4.023
1ST QUARTILE	0.7	0.1635	0.0456	0.0962	3.52	0.737	0.330
2ND QUARTILE	2.3	0.3244	0.1490	0.2534	9.10	2.098	0.926
3RD QUARTILE	6.2	0.6393	0.4360	0.6126	23.41	4.522	2.775
VOL. WGT. MEAN	********	0.2946	0.2637	0.4026	13.59	2.524	1.343

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	130	104	104	104	121
MAXIMUM	11.660	3.080	1.480	6.468	30.899
MINIMUM	0.000	0.000	0.000	0.016	0.000
RANGE	11.660	3.080	1.480	6.451	30.899
ARITH. MEAN	0.896	0.303	0.246	0.453	2.392
ARITH. STD. DEV	1.278	0.519	0.310	0.753	4.037
GEOM. MEAN	0.530	0.113	0.138	0.245	0.911
GEOM. STD. DEV.	3.034	4.745	3.697	2.973	5.122
1ST QUARTILE	0.210	0.025	0.036	0.131	0.262
2ND QUARTILE	0.478	0.093	0.137	0.241	1.050
3RD QUARTILE	1.241	0.330	0.322	0.527	2.492
VOL. WGT. MEAN	0.653	0.184	0.150	0.276	1.635

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04

PERIOD OF REPORT : JAN 1, 85 TO JAN 1,86

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	161	68	141	143	130	131	117
MAXIMUM	52.0	5.0621	4.8343	6.9888	311.04	28.800	17.325
MINIMUM	0.0	0.0020	0.0001	0.0133	0.65	0.338	0.000
RANGE	52.0	5.0601	4.8342	6.9755	310.39	28.462	17.325
ARITH. MEAN	7.1	0.6222	0.3813	0.5829	23.44	4.416	2.598
ARITH. STD. DEV	7.6	0.7435	0.5300	0.7606	32.62	3.973	3.171
GEOM. MEAN	4.4	0.3262	0.1335	0.3252	13.18	3.118	1.511
GEOM. STD. DEV.	2.7	4.1200	8.3728	3.1986	3.09	2.401	3.015
1ST QUARTILE	2.1	0.1705	0.0880	0.1470	5.55	1.677	0.769
2ND QUARTILE	4.5	0.3877	0.2355	0.3844	16.35	3.333	1.426
3RD QUARTILE	8.4	0.8362	0.4847	0.7487	30.83	5.958	3.040
VOL. WGT. MEAN	*******	0.3983	0.3463	0.5347	20.09	3.799	2.086

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	132	117	119	119	125
MAXIMUM	46.500	3.969	1.674	8.954	25.728
MINIMUM	0.020	0.000	0.000	0.000	0.279
RANGE	46.480	3.969	1.674	8.954	25.449
ARITH. MEAN	1.785	0.519	0.213	0.494	3.292
ARITH. STD. DEV	4.245	0.673	0.271	0.970	3.527
GEOM. MEAN	0.899	0.271	0.152	0.236	2.180
GEOM. STD. DEV.	3.148	3.459	2.987	3.344	2.485
1ST QUARTILE	0.496	0.131	0.043	0.103	1.084
2ND QUARTILE	0.985	0.278	0.131	0.230	2.447
3RD QUARTILE	1.716	0.623	0.256	0.468	3.893
VOL. WGT. MEAN	1.545	0.417	0.173	0.402	2.766

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILMER/DAILY/AEROCHEM 89A

PERIOD OF REPORT : OCT 24, 85 TO JAN 1,86

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	42	0	27	27	26	26	24
MAXIMUM	25.8	********	1.2506	1.9040	46.44	15.812	4.928
MINIMUM	0.0	********	0.0097	0.0364	0.42	0.126	0.040
RANGE	25.8	********	1.2409	1.8676	46.02	15.686	4.888
ARITH. MEAN	4.1	********	0.2624	0.4284	9.87	3.394	1.224
ARITH. STD. DEV	5.8	********	0.3285	0.4811	12.54	3.654	1.339
GEOM. MEAN	2.3	********	0.1401	0.2710	4.98	2.018	0.723
GEOM. STD. DEV.	2.8	********	3.2543	2.6110	3.46	3.032	3.070
1ST QUARTILE	0.0	********	0.0683	0.1372	1.71	0.872	0.400
2ND QUARTILE	1.6	********	0.1455	0.2824	4.82	1.986	0.710
3RD QUARTILE	6.2	********	0.2507	0.4039	8.44	4.234	1.351
VOL. WGT. MEAN	*******	********	0.1695	0.2767	6.20	2.131	0.717

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	26	24	24	24	25
MAXIMUM	12.276	0.640	1.488	2.046	6.164
MINIMUM	0.000	0.000	0.000	0.040	0.015
RANGE	12.276	0.640	1.488	2.006	6.149
ARITH. MEAN	1.373	0.115	0.183	0.625	1.160
ARITH. STD. DEV	2.504	0.144	0.332	0.556	1.553
GEOM. MEAN	0.641	0.076	0.116	0.414	0.396
GEOM. STD. DEV.	3.467	2.999	3.758	2.750	5.460
1ST QUARTILE	0.240	0.028	0.017	0.283	0.106
2ND QUARTILE	0.650	0.064	0.069	0.413	0.304
3RD QUARTILE	0.900	0.151	0.148	0.826	1.551
VOL. WGT. MEAN	0.862	0.067	0.107	0.366	0.706

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH DIVIDED BY THE NUMBER OF SAMPLES.

PART VI

SUMMARY STATISTICS OF WET DEPOSITION BY REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 31, 84 TO JAN 1,86

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	720	340	574	577	540	541	469
MAXIMUM	170.0	6.6138	5.5011	9.8260	297.50	32.300	17.556
MINIMUM	0.0	0.0000	0.0000	0.0010	0.08	0.000	0.000
RANGE	170.0	6.6138	5.5011	9.8250	297.42	32.300	17.556
ARITH. MEAN	6.1	0.5237	0.3291	0.5183	18.16	3.560	1.883
ARITH. STD. DEV	10.2	0.6750	0.4969	0.7734	27.10	3.847	2.853
GEOM. MEAN	2.8	0.2832	0.1099	0.2470	7.71	1.954	0.851
GEOM. STD. DEV.	3.8	3.6415	7.6862	3.8179	4.26	3.459	3.810
1ST QUARTILE	1.0	0.1444	0.0456	0.1019	2.57	0.880	0.302
2ND QUARTILE	3.1	0.3248	0.1569	0.2896	8.41	2.234	0.743
3RD QUARTILE	8.0	0.6442	0.4191	0.6628	23.66	5.182	2.231
VOL. WGT. MEAN	*******	0.3278	0.2778	0.4373	14.44	2.834	1.369

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	541	473	474	474	521
MAXIMUM	16.422	3.080	5.072	9.902	30.899
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	16.422	3.080	5.072	9.902	30.899
ARITH. MEAN	0.883	0.258	0.289	0.424	2.349
ARITH. STD. DEV	1.230	0.420	0.516	0.761	3.557
GEOM. MEAN	0.515	0.116	0.149	0.228	0.929
GEOM. STD. DEV.	3.073	4.156	3.684	3.070	4.986
1ST QUARTILE	0.231	0.027	0.048	0.103	0.329
2ND QUARTILE	0.540	0.080	0.137	0.218	1.106
3RD QUARTILE	1.118	0.288	0.327	0.463	3.063
VOL. WGT. MEAN	0.704	0.167	0.208	0.307	1.822

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 30, 84 TO JAN 1,86

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	312	0	263	263	250	247	235
MAXIMUM	53.6	********	0.7981	1.5720	103.74	10.800	25.536
MINIMUM	0.0	********	0.0000	0.0015	0.00	0.000	0.032
RANGE	53.6	********	0.7981	1.5705	103.74	10.800	25.504
ARITH. MEAN	7.5	********	0.0813	0.2485	9.84	1.663	2.723
ARITH. STD. DEV	9.4	********	0.1333	0.2891	12.66	2.193	3.727
GEOM. MEAN	3.5	********	0.0176	0.1330	4.64	0.997	1.274
GEOM. STD. DEV.	4.0	********	9.1277	3.2804	3.90	3.726	3.709
1ST QUARTILE	1.4	********	0.0038	0.0579	1.70	0.366	0.513
2ND QUARTILE	3.9	********	0.0257	0.1277	5.45	1.008	1.317
3RD QUARTILE	9.6	********	0.0849	0.3185	12.20	2.721	3.184
VOL. WGT. MEAN	*******	********	0.0713	0.2180	8.30	1.553	2.185

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	249	235	236	235	244
MAXIMUM	25.116	3.168	9.966	19.520	38.690
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	25.116	3.168	9.966	19.520	38.690
ARITH. MEAN	0.608	0.360	0.343	0.469	2.336
ARITH. STD. DEV	1.776	0.535	0.766	1.470	4.045
GEOM. MEAN	0.329	0.158	0.184	0.185	1.055
GEOM. STD. DEV.	3.435	3.929	3.435	3.558	4.524
1ST QUARTILE	0.072	0.063	0.056	0.076	0.094
2ND QUARTILE	0.234	0.123	0.156	0.168	0.927
3RD QUARTILE	0.644	0.407	0.397	0.368	2.837
VOL. WGT. MEAN	0.511	0.289	0.276	0.377	1.949

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 31, 84 TO JAN 1,86

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	353	41	288	287	271	272	248
MAXIMUM	90.2	2.0944	4.8662	7.1526	253.89	37.128	18.564
MINIMUM	0.0	0.0028	0.0000	0.0102	0.30	0.074	0.000
RANGE	90.2	2.0917	4.8662	7.1424	253.59	37.054	18.564
ARITH. MEAN	8.4	0.6303	0.4934	0.7661	25.15	4.862	2.235
ARITH. STD. DEV	10.7	0.5072	0.6346	0.9115	32.21	5.189	2.799
GEOM. MEAN	4.2	0.4008	0.2306	0.4260	12.37	2.985	1.200
GEOM. STD. DEV.	3.4	3.6265	4.6874	3.2180	3.68	2.862	3.361
1ST QUARTILE	1.6	0.3093	0.1129	0.2107	5.24	1.574	0.596
2ND QUARTILE	4.4	0.4762	0.2772	0.4615	13.69	3.120	1.246
3RD QUARTILE	11.2	0.7523	0.5478	0.8614	29.87	6.313	2.822
VOL. WGT. MEAN	*******	0.4588	0.4632	0.7171	22.58	4.380	1.880

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	272	252	253	252	259
MAXIMUM	14.742	3.648	3.757	6.633	23.275
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	14.742	3.648	3.757	6.633	23.275
ARITH. MEAN	1.259	0.319	0.232	0.479	2.869
ARITH. STD. DEV	1.832	0.516	0.369	0.821	3.579
GEOM. MEAN	0.689	0.175	0.154	0.233	1.346
GEOM. STD. DEV.	3.150	3.486	3.649	3.650	4.085
1ST QUARTILE	0.319	0.058	0.028	0.079	0.504
2ND QUARTILE	0.649	0.153	0.120	0.225	1.520
3RD QUARTILE	1.481	0.347	0.275	0.492	3.568
VOL. WGT. MEAN	1.134	0.269	0.196	0.405	2.486

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 31, 84 TO JAN 1,86

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	569	281	508	512	482	485	441
MAXIMUM	70.0	5.0621	4.8343	6.9888	311.04	32.396	57.400
MINIMUM	0.0	0.0008	0.0000	0.0016	0.39	0.072	0.000
RANGE	70.0	5.0613	4.8343	6.9872	310.65	32.324	57.400
ARITH. MEAN	7.5	0.5838	0.3843	0.5879	23.57	4.378	3.035
ARITH. STD. DEV	8.3	0.6325	0.4755	0.6838	27.08	3.869	4.373
GEOM. MEAN	4.4	0.2939	0.1195	0.3244	13.98	3.029	1.731
GEOM. STD. DEV.	3.0	4.6565	10.8127	3.3931	3.00	2.580	3.006
1ST QUARTILE	2.1	0.1751	0.0912	0.1654	7.11	1.768	0.812
2ND QUARTILE	4.6	0.3668	0.2284	0.3713	15.66	3.375	1.841
3RD QUARTILE	9.4	0.7979	0.4951	0.7948	31.59	5.891	3.544
VOL. WGT. MEAN	*******	0.4054	0.3599	0.5532	21.16	3.925	2.543

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	487	442	450	450	473
MAXIMUM	46.500	21.350	4.550	12.262	28.405
MINIMUM	0.000	0.000	0.000	0.000	0.010
RANGE	46.500	21.350	4.550	12.262	28.395
ARITH. MEAN	1.638	0.594	0.392	0.597	3.024
ARITH. STD. DEV	2.653	1.194	0.534	0.996	3.287
GEOM. MEAN	0.989	0.313	0.231	0.331	1.868
GEOM. STD. DEV.	2.802	3.195	3.307	3.022	2.917
1ST QUARTILE	0.515	0.141	0.083	0.166	0.921
2ND QUARTILE	1.086	0.329	0.225	0.341	2.230
3RD QUARTILE	1.980	0.684	0.462	0.653	3.875
VOL. WGT. MEAN	1.474	0.498	0.332	0.506	2.663

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

PART VII

SUMMARY STATISTICS OF AIR CONCENTRATION BY STATION, REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AIR #11

PERIOD OF REPORT : JAN 8,85 TO DEC 25,85 PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	NITRIC AS N UG/M**3	AMMONIUM AS N UG/M**3	NITRATE AS N UG/M**3	TOTL NO3 AS N UG/M**3
# OF SAMPLES :	271.0	276.00	276.00	276.000	276.00	276.00
MAXIMUM :	26.2	24.49	1.69	4.180	1.80	2.90
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.01
RANGE :	26.2	24.49	1.69	4.180	1.80	2.89
ARITH. MEAN :	3.8	3.44	0.41	0.868	0.15	0.57
ARITH. STD. DEV :	4.9	3.84	0.38	0.836	0.25	0.50
GEOM. MEAN :	1.7	2.09	0.28	0.597	0.07	0.37
GEOM. STD. DEV. :	4.4	2.98	2.76	2.994	4.35	2.75
1ST QUARTILE :	0.7	1.05	0.13	0.290	0.03	0.19
2ND QUARTILE :	2.1	2.22	0.27	0.602	0.07	0.41
3RD QUARTILE :	4.4	4.25	0.59	1.222	0.17	0.80

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AIR #08

PERIOD OF REPORT : JAN 1,85 TO JAN 1,86

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	NITRIC AS N UG/M**3	AMMONIUM AS N UG/M**3	NITRATE AS N UG/M**3	TOTL NO3 AS N UG/M**3
# OF SAMPLES :	359.0	362.00	361.00	360.000	362.00	361.00
MAXIMUM :	40.0	25.13	1.52	4.040	1.27	1.79
MINIMUM :	0.0	0.00	0.00	0.001	0.00	0.00
RANGE :	40.0	25.13	1.52	4.039	1.27	1.79
ARITH. MEAN :	3.4	3.14	0.27	0.664	0.05	0.32
ARITH. STD. DEV :	4.7	3.67	0.29	0.739	0.13	0.35
GEOM. MEAN :	1.3	1.85	0.15	0.370	0.02	0.17
GEOM. STD. DEV. :	5.5	3.03	3.30	3.273	5.67	3.27
1ST QUARTILE :	0.5	1.02	0.06	0.187	0.00	0.08
2ND QUARTILE :	1.7	1.83	0.13	0.360	0.01	0.16
3RD QUARTILE :	4.3	3.48	0.37	0.807	0.05	0.41

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AIR #16

PERIOD OF REPORT : JAN 1,85 TO JAN 1,86 PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	NITRIC AS N UG/M**3	AMMONIUM AS N UG/M**3	NITRATE AS N UG/M**3	TOTL NO3 AS N UG/M**3
# OF SAMPLES :	303.0	306.00	303.00	306.000	306.00	303.00
MAXIMUM :	4.0	9.91	0.84	2.092	0.56	1.16
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00
RANGE :	4.0	9.91	0.84	2.092	0.56	1.16
ARITH. MEAN :	0.4	0.88	0.07	0.204	0.03	0.09
ARITH. STD. DEV :	0.7	1.16	0.10	0.282	0.06	0.14
GEOM. MEAN :	0.2	0.60	0.06	0.126	0.02	0.06
GEOM. STD. DEV. :	5.1	3.04	3.73	3.489	5.17	3.68
1ST QUARTILE :	0.0	0.27	0.01	0.057	0.00	0.02
2ND QUARTILE :	0.1	0.59	0.04	0.117	0.01	0.05
3RD QUARTILE :	0.6	1.10	0.09	0.238	0.02	0.11

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AIR #02

PERIOD OF REPORT : JAN 1,85 TO JAN 1,86

	SULPHUR DIOXIDE UG/M***3	SULPHATE UG/M***3	NITRIC AS N UG/M***3	AMMONIUM AS N UG/M***3	NITRATE AS N UG/M***3	TOTL NO3 AS N UG/M***3
# OF SAMPLES :	350.0	350.00	349.00	349.000	350.00	349.00
MAXIMUM :	59.9	30.33	2.78	6.222	2.61	4.42
MINIMUM :	0.0	0.21	0.00	0.051	0.00	0.05
RANGE :	59.9	30.12	2.78	6.171	2.61	4.37
ARITH. MEAN :	8.8	5.12	0.53	1.481	0.49	1.02
ARITH. STD. DEV :	10.7	4.69	0.48	1.150	0.48	0.72
GEOM. MEAN :	4.4	3.64	0.36	1.055	0.31	0.77
GEOM. STD. DEV. :	3.9	2.31	2.69	2.474	3.10	2.27
1ST QUARTILE :	2.1	2.10	0.18	0.613	0.16	0.46
2ND QUARTILE :	5.5	3.54	0.39	1.119	0.35	0.88
3RD QUARTILE :	10.3	6.57	0.73	2.065	0.66	1.39